

DART
AEROSPACE
S003572

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CANADA

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Step Assembly

PART NO: D3724-042

Revision:

Operation: Start up Operation

Quantity: 1

Change No:

Mfg Date: 10/30/17

Job No: 167014

SEG 100 CUT
2.0 HRS
CPL



Dart Hawkesbury
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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

Reprint
D3724-042
Job Sheet 167014



Part No: D3724-042

Job Qty: 1 ea

Part Name: Step Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/23/17

Job Tracking No:

Due Date: 11/3/17

Created By: Victoria Michaud-Febrille

Type: SOLD

Description:

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
					hrs	Hrs			
90	Start up Operation	1 Ea		11/2/17	0.00	0.00	Start Up Large Fab2		<i>CPC</i> AUG 30 2017
100	Large Fab	1 pcs		11/2/17	0.00	5.95	Large Fab 8		<i>CPC</i> 38
110	QC	1 pcs		11/2/17	0.00	0.00	QC6		<i>CPC</i> 9-89
120	Large Fab	1 pcs		11/2/17	0.00	5.95	Large Fab 2		<i>CPC</i> 2017-11-10 JSL
130	QC	1 pcs		11/2/17	0.00	0.00	QC9		<i>CPC</i> 17-11-14
135	QC	1 pcs		11/2/17	0.00	0.00	QC5		<i>CPC</i> 17-11-16
140	HandFinish	1 pcs		11/2/17	0.00	0.49	HandFinish1		<i>CPC</i> 2017-11-16 JSL
150	QC	1 pcs		11/2/17	0.00	0.00	QC3		<i>CPC</i> 17-11-16
160	Large Fab	1 pcs		11/2/17	0.00	5.95	Large Fab 2		<i>CPC</i> 17-11-16
170	QC	1 pcs		11/2/17	0.00	0.00	QC10		<i>CPC</i> 17-11-16
180	QC	1 pcs		11/2/17	0.00	0.00	QC5		<i>CPC</i> 17-11-16
190	HandFinish	1 pcs		11/2/17	0.00	0.49	HandFinish1		<i>CPC</i> 2017-11-16 JSL
200	Powdercoat	1 pcs		11/2/17	0.00	0.34	Powdercoat1		<i>CPC</i> 17-11-16
210	QC	1 pcs		11/2/17	0.00	0.00	QC3		<i>CPC</i> 17-11-16
220	HandFinish	1 pcs		11/3/17	0.00	0.49	HandFinish3		<i>CPC</i> 17-11-16
230	QC	1 pcs		11/3/17	0.00	0.00	QC5		<i>CPC</i> 17-11-16
240	Packaging	1 pcs		11/3/17	0.00	0.00	Packaging3		<i>CPC</i> 17-11-16
250	QC21-SA	1 Ea		11/3/17	0.00	0.00	QC21		<i>CPC</i> 17-11-16

Part Op 100 - 1-Cut D3737-2 as per dwg D3737 2-Cut D3738-2 as per dwg D3738 3-Deburr and bevel ends for welding

Descriptions: 120 - 1-Weld D3738-1, D3737-1 and D3733-1 as per dwg D3724 2-Grind flush

160 - *****REMEMBER PAT DIMENSION ARE WITH THE END CAPS***** 1-Apply Magnobond before installing rivets A/R Magnobond 6398 Batch: *4137712* 2-Rivet D3741-1 and D3730-1 to brackets before installing on step as per dwg D3724 (RIVET HEAD MUST FACE FWD OF STEP) 3-Transfer holes from D3730-1 and D3741-1 into step as per dwg D3724 4-Deburr 5-Apply magnabond as per dwg D3724 A/R Magnabond 6398 Batch: *4137712* 6-Rivet brackets in place on step as per dwg D3724 7-Weld both end cap as per Dwg D3724 8-Grind end cap welds flush Inspect for foreign object per QSI 024

190 - 1- Touch up with alodine

200 - START TIME: *11:40* OVEN TEMPERATURE: *320°* FINISH TIME: *12:10*

N 138014

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D2622-120C <i>→ 3162484</i>	1	207	0	0
120-Large Fab	D3733-1 <i>→ 5003334</i>	1	0	0	0
160-Large Fab	CR3213-5-4 <i>5004925</i>	32 <i>5006369</i>	11	0	0
	D2734 <i>164510</i>	2	30	0	0
	D3728-1 <i>5004925</i>	3	0	0	0

APPRO CR 3213-5-4

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION ☐ Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved	AGAINST DEPARTMENT/PROCESS ☐ Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☒ Engineering ☐ Quality ☐ Other			
Date : 17/11/14	Step #:	QTY Effective :		MRB (QSI042) Approval DAS 12 9-89 17/11/14	
Description Work Order Deviation		Disposition		Completed By DAS 12 9-89 17/11/14 Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Typo on dwg.		CR3216-5-4 should be CR3213-5-4			

Root Cause		FAULT CATEGORY									
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

D3729-1	S003150	1	0	0	0
D3730-1	S005063	8	0	0	0
D3741-1	S004961	8	0	0	0
MS20470AD5-11	F107100-1	12	831	0	0
MS20470AD5-16	F107100	4	691	0	0

Part Specifications

Specifications could not be found.

Plex 10/27/17 9:32 AM dart.Michaud-Febrille.Victoria

REFERENCE ONLY

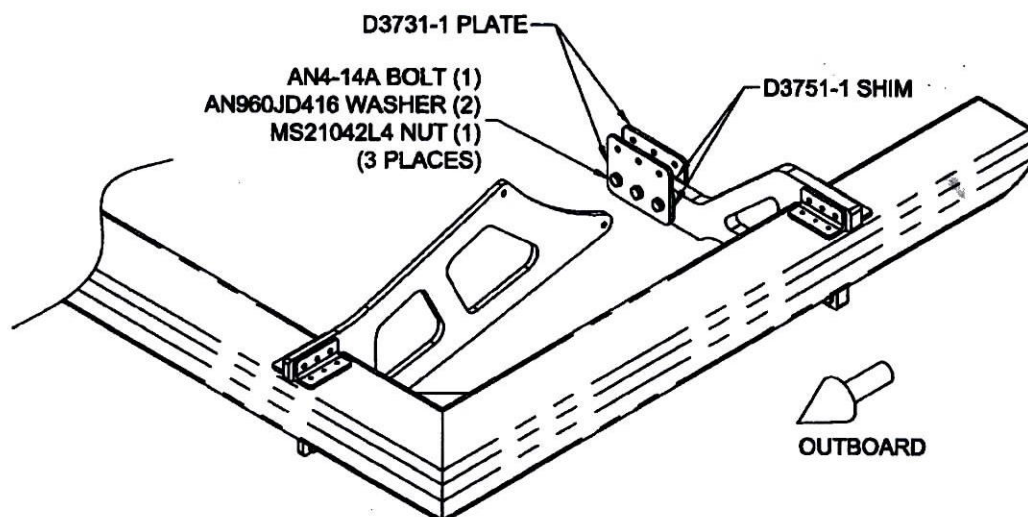


Figure 11 – Step Plate Assembly
(D205-541-048 Shown; D205-541-047 Opposite)

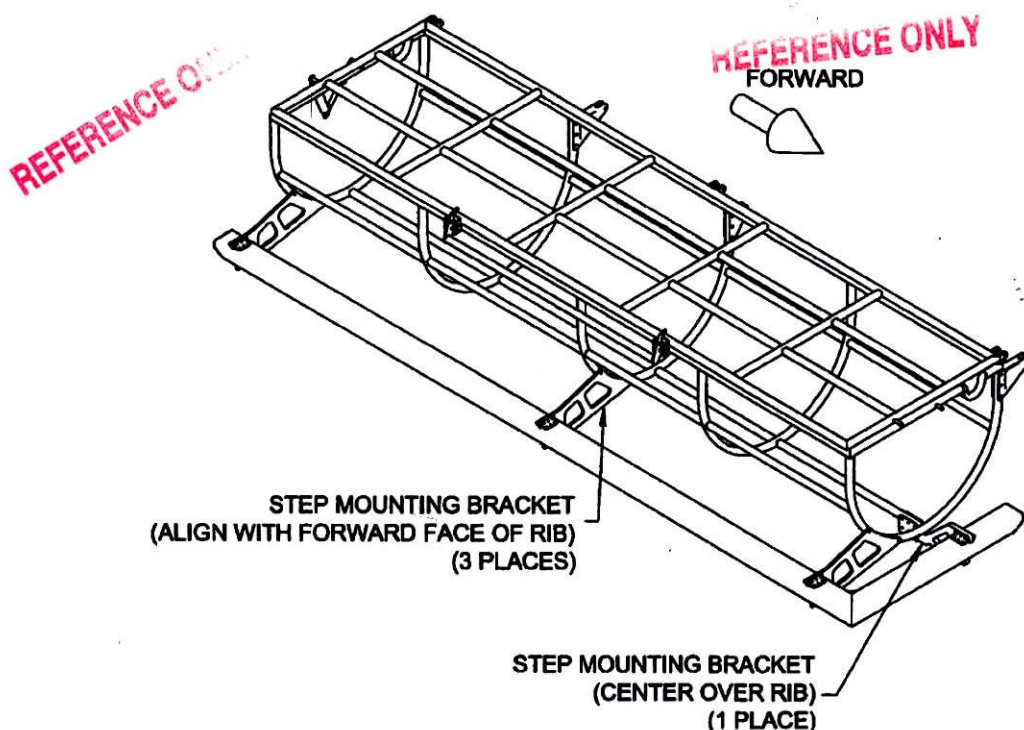


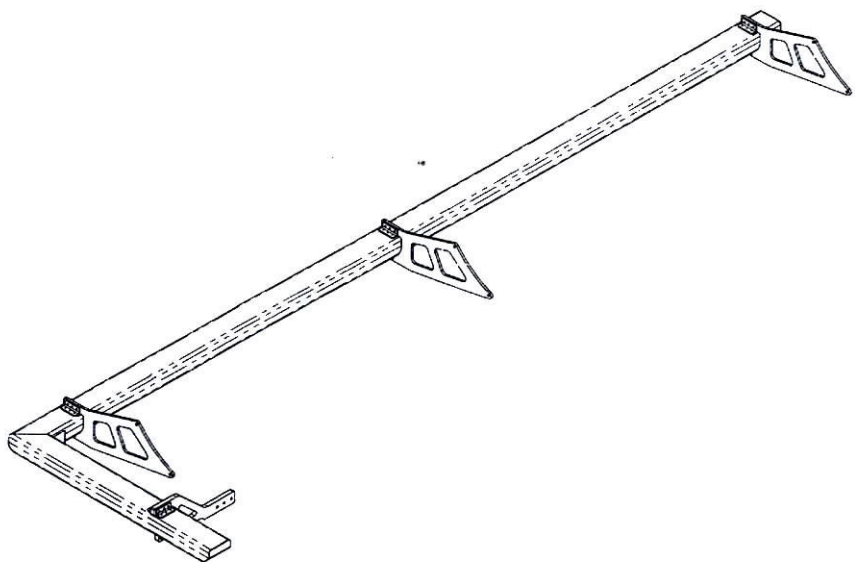
Figure 12 – Step Alignment

(D205-541-046 Heli-Utility-Basket™ with D205-541-048 Heli-Access-Step™ Shown;
D205-541-045 Heli-Utility-Basket™ with D205-541-047 Heli-Access-Step™ Opposite)
(D205-541-044 Heli-Utility-Basket™ with D205-541-048 Heli-Access-Step™ Similar;
D205-541-043 Heli-Utility-Basket™ with D205-541-047 Heli-Access-Step™ Similar & Opposite)

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Revision: J
Date: 10.03.08

8 7 6 5 4 3 2 1



D3724-042 STEP ASSY (SHOWN)
D3724-041 STEP ASSY (OPPOSITE)

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3724-041	STEP ASSEMBLY
	X	D3724-042	STEP ASSEMBLY
2	2	D2734-1	END PLATE
8	8	D3730-1	ANGLE
1	1	D3733-1	GUSSET
1		D3737-1	STEP
	1	D3737-2	STEP
1		D3738-1	STEP
	1	D3738-2	STEP
1	1	D3747-1	DECAL
32	32	CR3216-5-4	RIVET
12	12	MS20470AD5-11	RIVET
4	4	MS20470AD5-16	RIVET
8	8	D3741-1	ANGLE
3	3	D3728-1	STEP BRACKET
1	1	D3729-1	STEP BRACKET

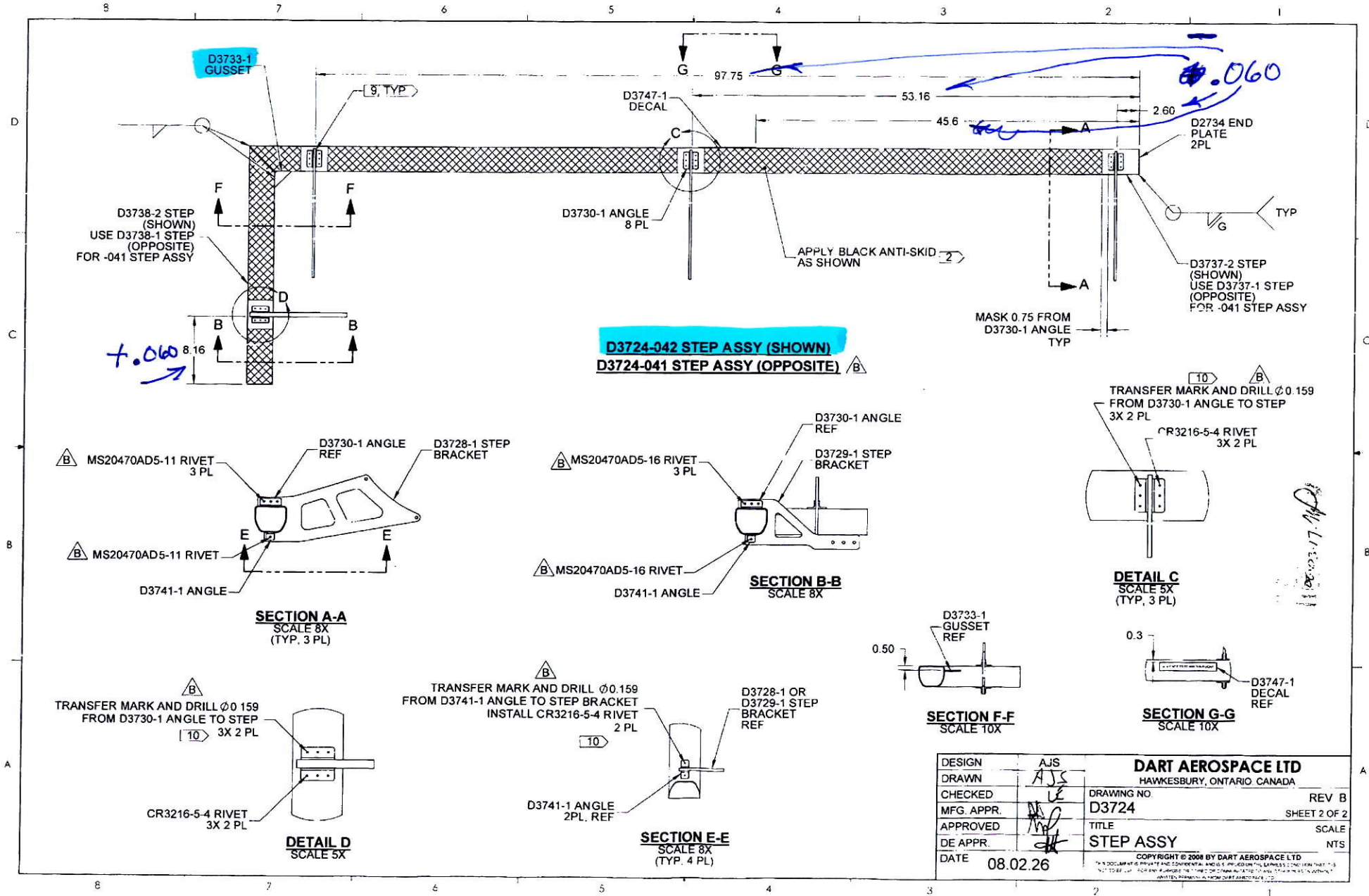
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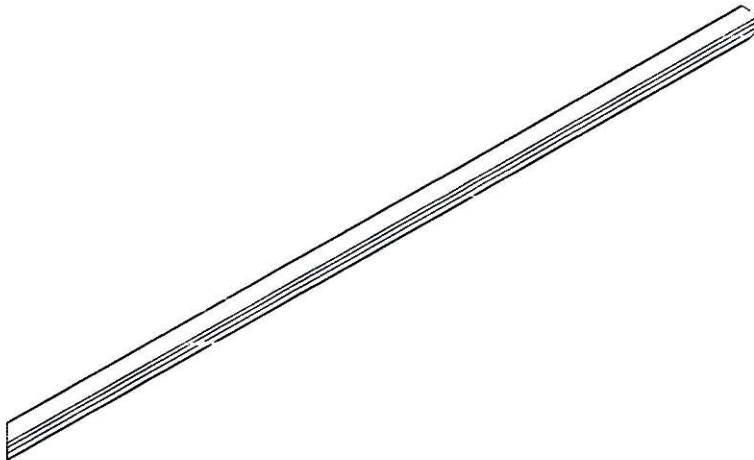
- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT WELDMENT PER DART QSI 005 4.1 PRIOR TO ASSEMBLY
POWDER COAT ENTIRE ASSEMBLY WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PER DART QSI 005 4.4 WHERE INDICATED
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 13.89 lbs
- 8) WELDING: PER DART QSI 004
- 9) APPLY MAGNOBOND 6398 BETWEEN MATING SURFACES WHERE INDICATED
- 10) TOUCH UP CHEMICAL CONVERSION COAT ON ALL PARTS TRANSFER-DRILLED. (REF QSI 005 4.1)

B	ADD -041 ASSEMBLY. ADD D3747-1 DECAL TO P/L SHEET 2 TRANSFER MARKING INSTRUCTIONS FOR INSTALLING D3730-1 & D3741-1 ON D3728-1 & D3729-1 DELETED. SHEET 2 DETAIL C, D & SECTION E-E Ø0.159 WAS Ø0.098. ZONE D4 53.16 DIM WAS 53.22. 2.60 DIM WAS 2.66. ADD SECTION G-G		AJS	08.02.26
A	NEW ISSUE		AJS	08.02.04
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DESIGN	AJS		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	LE		DRAWING NO.	REV. B
CHECKED	MP		D3724	SHEET 1 OF 2
MFG APPR	MP		TITLE	SCALE
APPROVED	MP		STEP ASSY	NTS
DE APPR			COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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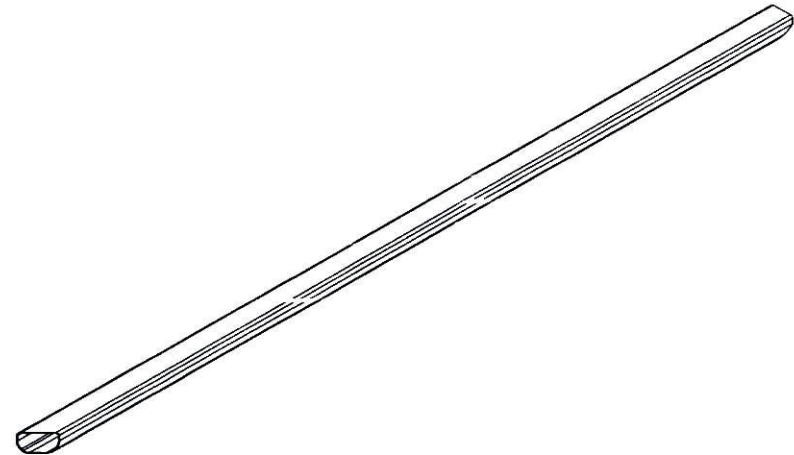
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D3731-1 D3751-1 MEASURE IS WITH END CAPS





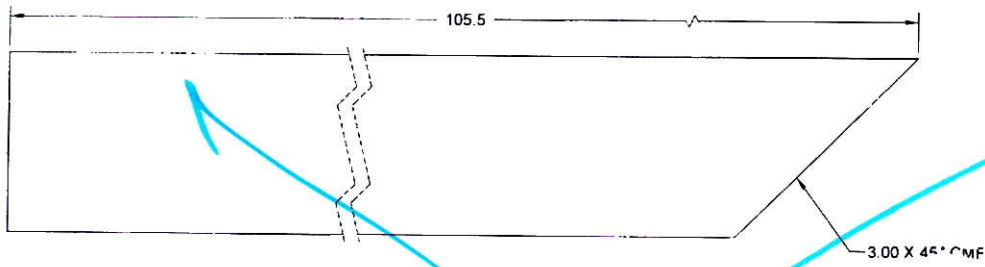
D3737-1 STEP



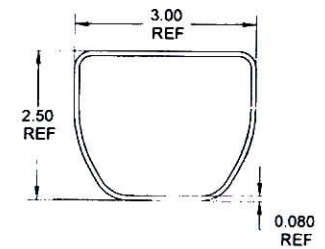
D3737-2 STEP

- NOTES:**
- 1) MATERIAL: MAKE FROM D2622-106 EXTRUSION
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 7.67 lbs

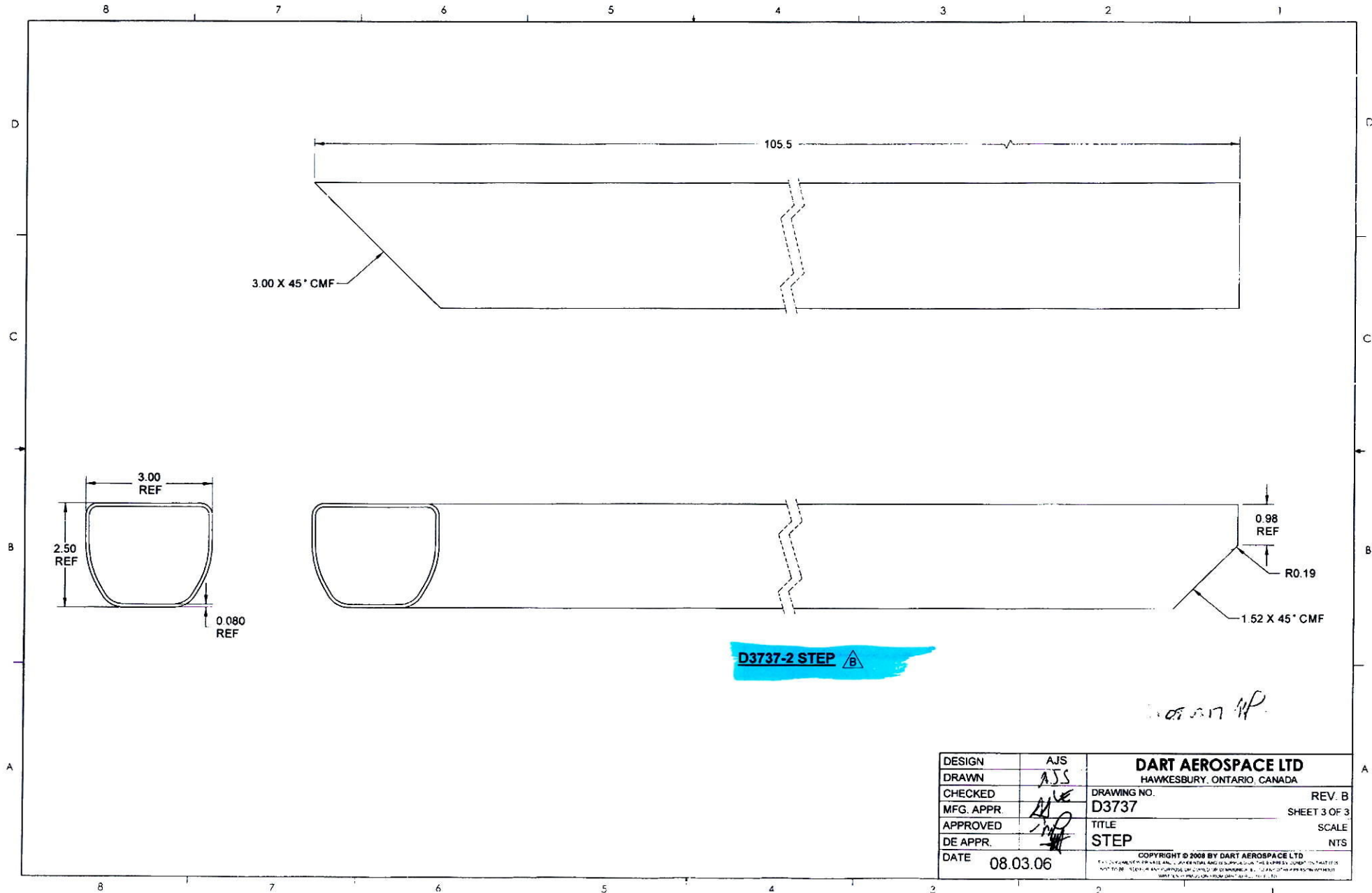
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DRAWN	ALS		
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MFG. APPR.	HE	D3737	SHEET 1 OF 3
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D3737-1 STEP



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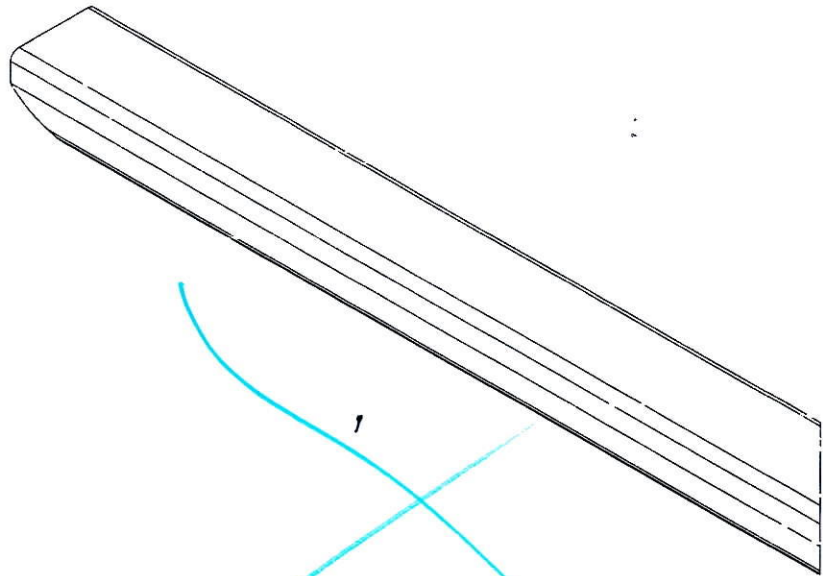
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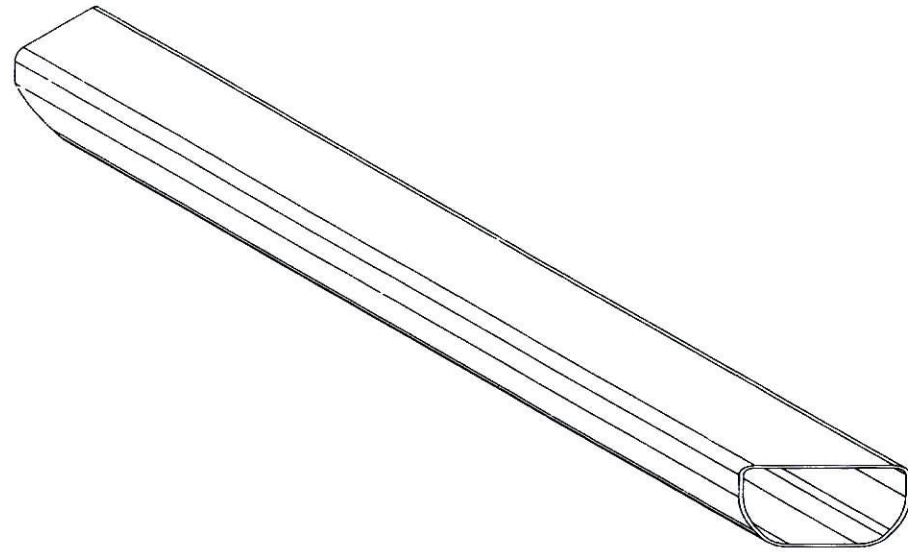
C

B

A



D3738-1 STEP



D3738-2 STEP

08.03.17/1/2

- NOTES:
- 1) MATERIAL: MAKE FROM D2622-29 EXTRUSION
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.96 lbs

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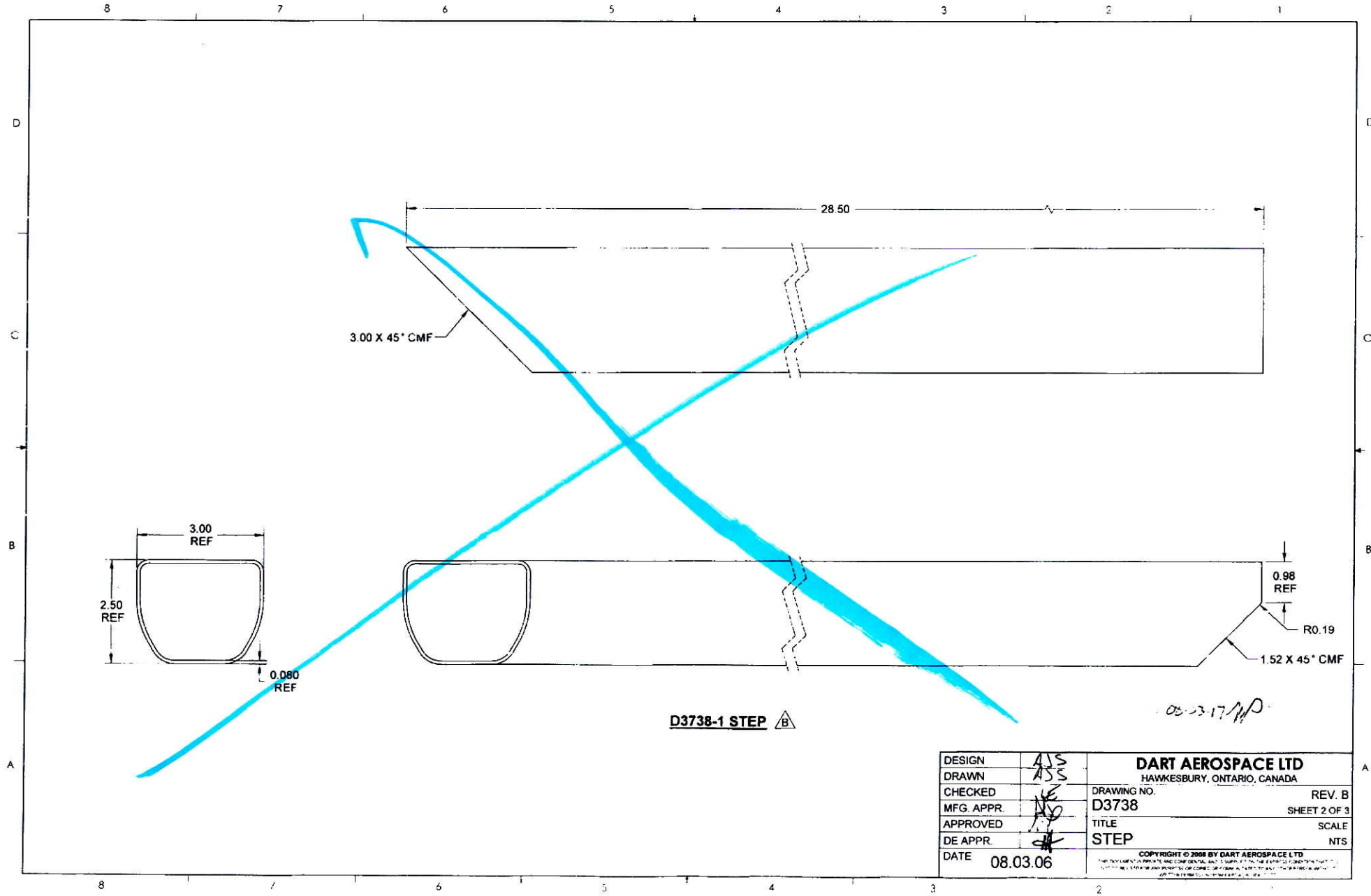
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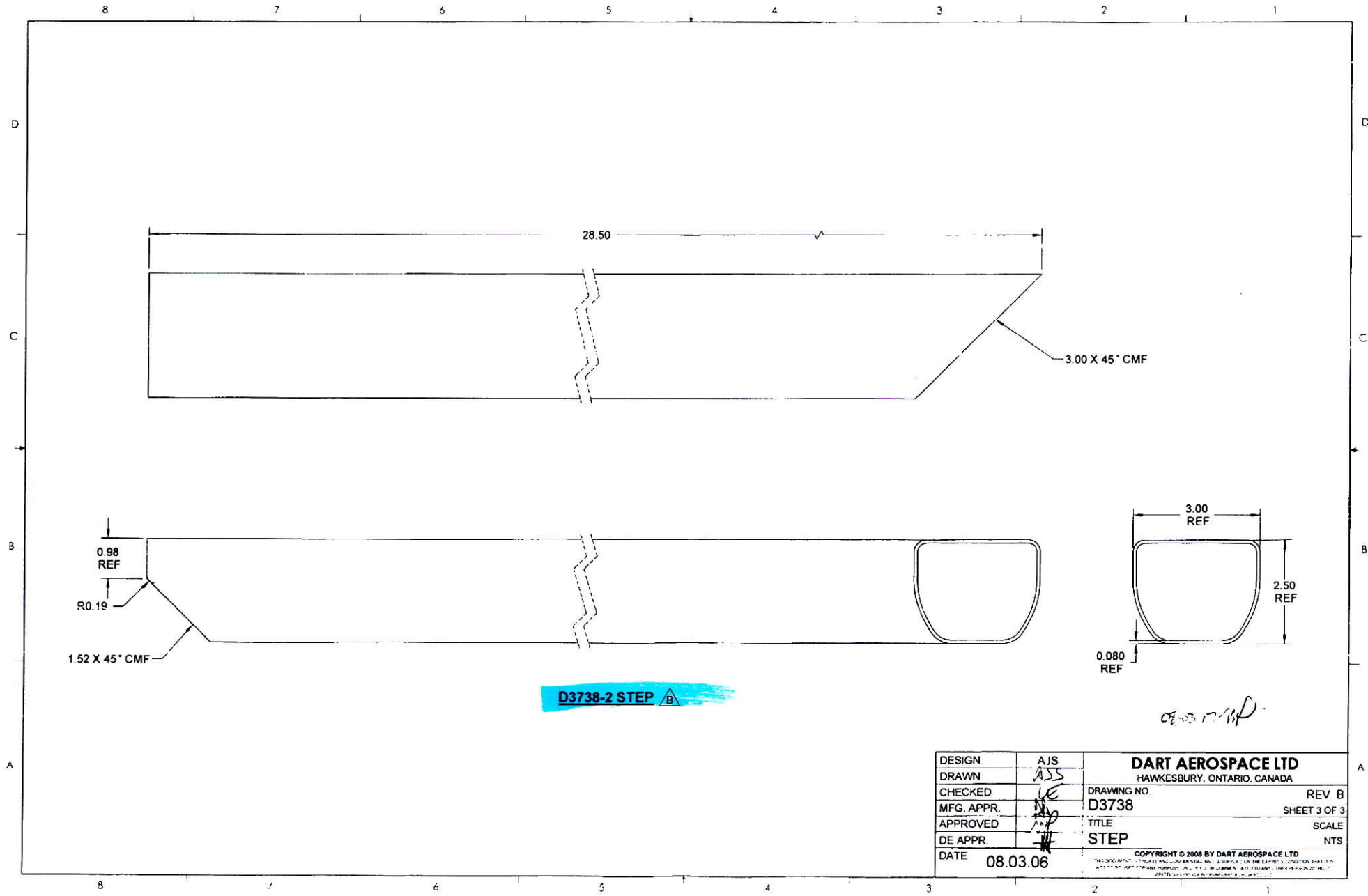
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